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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,213	09/11/2003	Darren T. Sapashe	CM06328J	6551

24273 7590 11/13/2007

MOTOROLA, INC
INTELLECTUAL PROPERTY SECTION
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EXAMINER	
FAULK, DEVONA E	

ART UNIT	PAPER NUMBER
2615	

MAIL DATE	DELIVERY MODE
11/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/660,213	SAPASHE ET AL.	
	Examiner	Art Unit	
	Devona E. Faulk	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 September 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, filed 9/26/2007, with respect to the rejection(s) of claim(s) 1-3 under 103(a) have been fully considered and are persuasive regarding prior art Ross. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Cooper.

2. Applicant's arguments filed 9/26/2007 have been fully considered but they are not persuasive regarding prior art Helms. Regarding prior art Helms, the applicant asserts that Helms requires measuring both the desired (amplified output) signal and the background signal simultaneously and that Helms cannot independently sense background noise. The examiner asserts that the claim language does not recite that the background noise is independently sensed and that it is not implicit that the background noise is independently sensed in a two-way radio environment.

3. The applicant has amended claim 5 to overcome the 112 2nd rejection set forth in the previous office action.

4. Claim 4 is cancelled.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claim 1-3 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Helms (US 5,666,426) in view of Cooper (US 5,790,671).

Regarding **claim 1**, Helms discloses a method for controlling volume in a communication device, comprising:

Detecting a change in manual volume setting (Figure 2,at step 50);

Measuring current background audio level (Figure 2 at step 32);

Determining a relationship between the current background audio level and the volume setting (Figure 2; column 3, lines 19-64);

Establishing the relationship as a desired volume level to be maintained (Figure 2; column 3, lines 19-64) ;

Sensing a subsequent change in the manual volume setting (Figure 2 at step 50);

Monitoring subsequent background audio level by engaging a microphone of the communication device in response to the subsequent change in the manual volume setting (column 3, lines 19-64;column 4, lines 1-28 and lines 43-55);

Comparing the current background level to the subsequent background level;(Figure 2 at step 44; column 4, lines 1-35)

Determining whether a change in background level occurred (Figure 2 at step 46; column 4, lines 30-33); and

Automatically adjusting volume of a speaker based on the relationship (column 4, lines 1-58; Figure 2).

Helms discloses a communication device, for example a car stereo. Helms fails to disclose a two-way communication device. The examiner takes official notice that two-way radios are known in the art and that volume control is used in various devices. It would have been obvious to modify Helms so that the communication device is a two-way radio for the benefit of providing automatic volume control as taught by Helms to two-way radios.

Helms as modified discloses engaging a microphone of the communication device in response to the subsequent change in the manual volume setting.

Helms fails to disclose switchably engaging a microphone. The examiner has interpreted this as selectively engaging a microphone. Cooper discloses selectively engaging a microphone column 4, lines 21-32). It would have been obvious to modify Helms to switchably or selectively engage the microphone in order to better provide improved intelligibility (Cooper, column 1, lines 33-38).

Regarding **claim 3**,Helms discloses a communication device, including:

A controller for monitoring background audio levels (DSP 16, Figure 1; (column 3,lines 15-40; column 4, lines 43-58);

A manual volume control coupled to the controller, the manual volume control setting a volume level as a user preference for a current background audio level (22, Figure 1;column 2,lines 49-51);

A microphone coupled to the controller for monitoring background noise levels in response to changes in the manual volume control (microphone 12, Figure 1); and

The controller providing automatic adjustment of the volume level based on the user preference for the current background audio level in response to any change in the monitored background audio level (column 3,lines 15-40; column 4, lines 43-58).

Helms discloses that the microphone is coupled to the controller and monitoring and monitoring background noise levels in response to changes in the manual volume (column 2,lines 49-51; column 3, lines 19-64;column 4, lines 1-28 and lines 43-55).

Helms as modified discloses engaging a microphone of the communication device in response to the subsequent change in the manual volume setting.

Helms fails to disclose switchably coupling a microphone. The examiner has interpreted this as selectively engaging a microphone. Cooper discloses selectively engaging a microphone column 4, lines 21-32). It would have been obvious to modify Helms to switchably or selectively engage the microphone in order to better provide improved intelligibility (Cooper, column 1, lines 33-38).

The method of **claim 2** is implicit in the functionality of the communication device of claim 3. Claim 2 is rejected using Helms and Cooper as applied above to the rejection of claim 3.

Regarding **claim 5**, Helms discloses a communication device, comprising:

A controller having an intelligent automatic volume control (AVC) for determining when to sample an audio environment (DSP 16, Figure 1; (column 3,lines 15-40; column 4, lines 43-58);

A manual volume control coupled to the controller, the manual volume control establishing a user selected preferred volume level for an initial background audio level (22, Figure 1;column 2,lines 49-51);

A microphone coupled to the controller, the microphone sampling subsequent background audio levels in response to a subsequent change to the manual volume control being sensed by the intelligent AVC (microphone 12, Figure 1; column 2,lines 49-51; column 3, lines 19-64;column 4, lines 1-28 and lines 43-55);

A speaker coupled to the controller, the speaker having a volume level automatically adjusted by the controller based on the initial background audio level, the sampled subsequent background audio level and the user preferred volume level for the initial background audio level thereby maintaining a user established relationship between the volume heard at the speaker and the sampled subsequent background (20, Figure 1; column 2, line 63-column 4, line 57;column 5, lines 21-26)

Helms discloses a communication device, for example a car stereo. Helms fails to disclose a two-way communication device. The examiner takes official notice that two-way radios and transceivers are known in the art and that volume control is used in various devices. It would have been obvious to modify Helms so that the communication device is a two-way radio for the benefit of providing automatic volume control as taught by Helms to two-way radios.

Helms as modified discloses engaging a microphone of the communication device in response to the subsequent change in the manual volume setting.

Helms fails to disclose switchably coupling a microphone and an AVC engaging the microphone (Figure 1; 20 reads on AVC; column 3, lines 41-50). The examiner has interpreted this as selectively engaging a microphone. Cooper discloses selectively engaging a microphone (column 4, lines 21-32). It would have been obvious to modify Helms to switchably or selectively engage the microphone in order to better provide improved intelligibility (Cooper, column 1, lines 33-38).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 571-272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DEF

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